

1/103

Figure 1

AAGGAGCACC ACGAAAACGC CCCAACTGGT GGGCGGTAGG CCGTGAGGGG TTCTTGCTCTG TAGTGGGCGA
GAGCCGGGTG CATGACAAACA AAGTTGGCCA CCAACACACT GTTGGGTCCT GAGGCAACAC TCGGACTTGT
TCCAGGTGTT GTCCACCCGC CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGGCATC
AATGGATACG CTGCCGGCTA GCGGTGGCGT GTTCTTTGTG CAATATTCTT TGGTTTGTGT TGTGT

(SEQ ID NO 76)

2/103

Figure 2

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGNT GCGCAACAGC AATGATTCG CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GGCCGGCGTT CATCGAAATG TGTAATTCT TCCTTAACTC TTGTGTGT

(SEQ ID NO 77)

3/103

Figure 3

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GGCCGGCGTT CATCGAAATG TGTAAATTCT TTTTAACTC TTGTGTGT

(SEQ ID NO 78)

4/103

Figure 4

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AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGNT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGTGTGT TGAGTATTGG ATAGTGGTGG CGAGCATCTA
GATGAGCGCA TAGTCCTTGT GGCTGATGCG CTCGTCGAAA TGTGTAATTT CTTCTTTGGT GTNTGTGTGT
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(SEQ ID NO 79)

5/103

Figure 5

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGGATATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCCTTG TGGCTGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGG TTTNTGTGTG

T

(SEQ ID NO 80)

6/103

Figure 6

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCCTCCATCT TGGTGGTGCG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGCCCTTGC GGCTGATGCG TTCGNCGAAA TGTGTAATTT CTTCCTCGGT TTCTGTGTGT

(SEQ ID NO 81)

7/103

Figure 7

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGGT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATCGAA ATGTGTAATT TCTTCTTTGG TTTTGGGTGT
GT

(SEQ ID NO 82)

8/103

Figure 8

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATCGC CAGACACACT ATGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCCTTTG GGGCTGATGT GTTTCATCAA AATGTGTAAT TTCTTTTNG GTTTTNGTGT

GT

(SEQ ID NO 83)

9/103

Figure 2

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATTGAA ATGTGTAATT TCTTCTCTGG TTTTGTGTG

T

(SEQ ID NO 84)

10/103

Figure 10

AAGGAGCACC	ACGAAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTTCCCCGTCT	GTAGTGGACG
GGGGCCGGGT	GCACAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TCGGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGGTGTT	TGAGTATTGG	ATAGTGTTG	CGAGCATCTA
GATGAGCGCA	TAGTCCTTGT	GGCTGATGCC	CTCGTCGAAA	TGTGTAATT	CTTCTTTGGT	TTTGTGTGTGT

(SEQ ID NO 85)

11/103

Figure 11

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCGTCCATCT TGGTGGTGGG GTGTGGTGT TTAGGTATG GATAGTGGTT GCGAGCATCT
AGATGAGCGC GTAGTCCTTG TGGCTGATGC GTTCGTCGAA ATGTGTAATT TCCTCTTTGG GTTTTGTGT

GT

(SEQ ID NO 86)

12/103

Figure 12

AAGGAGCACC ACGAAAAGCA CCCCATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGNT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGNCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTNGTGT TGAATATTGG ATAGTGGTG CGAGCATCTA
GATGGGCGCG TAGTCCTTG TGAATGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGN NTTNGTGTG

T

(SEQ ID NO 87)

13/103

Figure 13

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCCTTG TGGCTGACGC GTTCATCGAA ATGTGTAATT TCCTCTTTGG TTTTGTGTG

T

(SEQ ID NO 88)

14/103

Figure 14

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGANGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTAG GGCTGATGCG TTCGTCGNAA TGTGTAATTT CTTCTTTGGT TTTTGTGTGT

(SEQ ID NO 89)

15/103

Figure 15

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAACCCGGGT GCACAACAGC AAATAATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTCG TGGCTGACGT GTTCATCGAA ATGTGTAATT TCTTNTNTTA ACTCTTGTGT

GT

(SEQ ID NO 90)

16/103

Figure 16

AAGGAGCACC ACGAAAAGCA CCCCAAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC
CGTGTGGTGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTGT GACTGACGTG TTCAATCGAAA TGTGTAATTT CTTTCTTAAC TCTTGTGTGT

(SEQ ID NO 91)

17/103

Figure 17

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATAT CTTCTCTGGT TTTCGGTGTG
T

(SEQ ID NO 92)

18/103

Figure 18

AAGGAGCACC ACGAAAAGCA CTTC AATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCCGNT GCACAAACAGC AAATGATGCG CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGGTG TTCATCGAAA TGTGTAATTT CTTTTTNNAC TCTTGTGTGT

(SEQ ID NO 93)

19/103

Figure 12

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TTAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGGTG TTCATCGAAA TGTGTAATT CTTCTTTGGT TTTNGTGTGT

(SEQ ID NO 94)

20/103

Figure 20

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGTG TGAGTATTGG ATAGTGGTG CGAGCATCTA
GATGAACGG TAGTCCCTTCG NGGNCNGCGT GTTCATCGAA ATGTGTAATT TCNTNTNTAA CTCTNGTGTG

T

(SEQ ID NO 95)

21/103

Figure 21

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATGCG CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCTTCG GGGCCGGCGT GTTCATCGAA ATGTGTAATT TCTTTTTTAA CTCTTGTGTG

T

(SEQ ID NO 96)

22/103

Figure 22

AAGGAGCACC ACGAAAAGCA CTTCANTTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCCCT GAGACACAC TCGGTCGAAC
CGTGTGGAGT CCCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGC CGCGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTAAC TCTTGTGTGT

(SEQ ID NO 97)

23/103

Figure 23

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGN AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGTTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCNGCGTG TTCATCGAAA TGTGTAATTT CTTTTTTAAC TCTTGTGTGT

(SEQ ID NO 98)

24/103

Figure 24

AAGGAGCACG ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATT CTTTTTAAC TCTTGTGTGT

(SEQ ID NO 99)

25/103

Figure 25

AAGGAGCACC ACGAAAAGCA CCCCAACCTGG TGGGGTGCGA GCCGTGAGGG GTCCCTCGCCT GTAGTGGGCG
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGGCAACAC TCGGCTCGTT
CTGAGTGGTG TCCCTCCATC TTGTTGGGCG GGTGTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT
AAACGGATGC GTGGCCGGCA ACGTGGCGGT GTTCGTTGAA ATGTGTAATT TCTTTTGTGG TTTTGTGTG

T

(SEQ ID NO 100)

26/103

Figure 26

AAGGAGCACC ACGAAAAGCA TCCCAACAAG TGGGGTGCAA NCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACGACAAC AAGCAAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACT CGGGCTCTGT
TCGAGAGTTG TCCCACCATC TTGGTGGTGG GGTTGGTGTG TTGAGAATTG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCTACG GGAGCGTGT TCTTTTGTGC AATTTATTTC TTTGGTTTTT GTGT

(SEQ ID NO 101)

27/103

Figure 27

AAGGAGCACC ATTTCCCAGT CGATGAACTA GGGAACATAA AGTAGGCATC TGTAAGTGAT ATCTACTTGG
TGAATATGTT TTGTAAATCC TGTCACACCC GTGGATGGGT AGTCGGCAA ACGTCGACT GTCATAAGAA
TTGAAACGCT GGCACACTGT TGGTCCCTGA GGCAACACGT TGTGTTGTCA CCTGCTTGG TGGTGGGGTG
TGGACTTTGA CTTCTGAATA GTGGTTGCCA GCATCTAAAC ATAGCCTCGC TCGTTTTTCGA GTGGGGGCTGG
TTTGGCAATT TTA

(SEQ ID NO 102)

28/103

Figure 28

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AAGGAGCACC ATTTCCCACT CGGATGAACCT AGGGAACATA AAGTAGGCAT CTGTAGTGGG TATCTACTTG
GTGAATATGT TTTGTAAATC CTGTCCACCC CCGTGGATGG GTAGTCGGCA AACGTCGGA CTGTCATAAG
AATTGAAACG CTGGCACACT GTTGGGTCCT GAGGCAACAC GTTGTGTTGT CACCCCTGCTT GGTGGTGGGG
TGTTGGACTTT GACTTCTGAA TAGTGGTTGC GAGCATCTAA ACATAGCCCTC GCTCGTTTTC GAGTGAGGCT
GGTTTTTGCA ATTTTA
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(SEQ ID NO 103)

29/103

Figure 29

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AAGGAGCACC ACGAAGAGCA CTCCAATTGG TGGGTGCGA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAAC AAGCTAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACC CTCGGGTGCT
GTCCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT TGCAGGCATC AAAATGTATG
CGTTGTCGTT CTCGGCAACG TGTCTTTT GTGCAATT TA TTTTGGTGT TTTGT
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(SEQ ID NO 104)

30/103

Figure 30

AAGGAGCACC	ACGAAGAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGNGAGGG	GTCATCGTCT	GTAGTGGACG
AAGACTGGGT	GCACGACAAC	AAAGCAAGCC	AGACACACTA	TTGGGTCCTG	AGGCAACACC	CTCGGGTGCT
GCCCCCTCCAT	CTTGGTGGTG	GGGTGTGGTG	TTTGAGAACT	GGATAGTGGT	TGCGAGCATC	AAAAATGTAT
GCGTTGTCGT	TCGCGACAAC	GTGTTCTTTT	TGTGCAATT	TAAATCTTTT	GGTTTGGTA	GTGTTTGT

(SEQ ID NO 105)

31/103

Figure 31

AAGGAGCACC ACGAGAAGCA CTCCAATTGG TGGGGTGCAA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAC AAGCAAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACC CTCGGGTGCT
GTCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TCGGAGCATC AAAATGTATG
CGTTGTCGTT CGCGGCAACG TGTTCTTTT GTGCAATTTT TATTCTTTGG TTTTGTAGT GTTTGT

(SEQ ID NO 106)

32/103

Figure 32

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCAA GCCGTGAGGG GTTCCCGCCT GTAGTGGGCG
GGGCCGGGTG CGCAACAGCA AATGATTGCC AGACACACTA TTGGGCCCTG AGGCAACACT CGGATCGATT
GAGTGCTTGT CCCCCATCT TGGTGGTGCG GTGTGTGTT TGAGAACTGG ATAGTGGTTG CGAGCATCTA
AATGAACGCA CTGCCGATGG TGGTGTGTTT GTTTTGTA ATTTATTCT TTGGTTTGTG TGTGTGT

(SEQ ID NO 107)

33/103

Figure 33

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTCCGA GCCGTNAGGG GTTCTCGTCT GTAGTGGATG
GCAGCCGGGT GCACANCAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGNGTT TGAGTATTGG ATAGTGGTGG CGANCACTA
GATGAACGGG TAGTCCTCNG TGGCTGACGT GTTCATCAAA ATGTGTAATT TC'TTTTANGG GTTNGGTGT
CT

(SEQ ID NO 108)

34/103

Figure 34

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCNGAGGG GTTCTCGCCT GTAGTGGNCG
AGGGCCGGAT GCACAACAAC ACATGATTGC CAGACACACT ATTGGGCCCT GANACAACAC TCGGCCAGTC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTATNGG ATAGTNGTTG NGANCATCTA
AACGGCTGCG TNGNCNNGAA CGGTGGCGTG TTCGNTAAA TGTGTAATTT CTTTNNNGGT TTGGGTGTNT

(SEQ ID NO 109)

35/103

Figure 35

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGCCT GTAGTGGGCG
ANGGCCGGGT GCACAACAAC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCAGTC
CGTGTGGTGT CCCNCCATCT TGGTGGTGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
AANGGNTGCG TTGCCGNNAN CNGTGGCGTN TTCGNTAAA TGTGTAANTT CTTTTTNGGT TTGTGTGTGT

(SEQ ID NO 110)

36/103

Figure 36

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ATCGAAGATC CCGGCTTCTT CATAAGCTCC CACACGAATT GCTTGATTCA CTGGTTAGAC GATTGGGTCT
GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT CGAATCTGCC CAGACCCACC
AATTGTTGGT GTGCTGCGTG ATCCGATACG GGGCCATAGC TCAGCTGGGA GAGCGCCTGC TTTGACACGCA
GGAGGTCAGG AGTTCGATCC TCCTTGGCTC CACCATCTAA AACAA'CGTC GAAAGCTCAG AAATGAATGT
TCGTGGATGA ACATTGATTT CTGGTC'TTTG CACCAGAACT G'TT'CT'T'AAA AATTCGGTA TGTGATAGAA
GTAAGACTGA ATGATCTCTT TCACTGGTGA TCA'TTCAAGT CAAGGTAAAA TTTGCGAGTT CAAGCGCGAA
TTTTTCGGCGA ATGTCGTCTT CACAGTATAA CCAGATTGCT TGGGGT'ATA T
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(SEQ ID NO 111)

Figure 37

ATCGAAGACA TCAGCTTCTT CATAAGTATC CACACGAATT GCTTGATTCA TAGTCGAACG AATGCTGTAA
 CGCGACCCGT GTTATAGGTC TGTAGCTCAG TTGGTTAGAG CGCACCCCTG ATAGGGTGA GGTCCGGCAGT
 TCNAATCTGC CCAGACCTAC CAATTGCTTG GTCGAGAAGA ATACGGGGCC ATAGCTCAGC TGGGAGAGCG
 CCTGCCCTGC ACGCAGGAGG TCAGCGGTTT GATCCCGCTT GGCTCCACCA CTCCTCTCGTG TTGCGGTGAG
 TGTAAAGAG TTCAGAAATG ATGCCGCTTC AGGTTTGTCC TGTGAGTGC TGATTCTGG TCTTTTGACC
 GGTACGAAAA TCGTCTTTA AAAATTGGA TATGTAGTAG AAGTGACTGA TTAATTGCTT TCACTGGCAA
 TTGATCTGGT CAAGGTAAAA TTTGTAGTTC TCAAGACGCA AATTTCGGC GAATGTCGTC TTCACGATTG
 AGACAGTAAC CAGATTGCTT GGGTTATAT

37/103

(SEQ ID NO 112)

38/103

Figure 38

ATCGAAGACA CCGGCTTCGT CATAAGCTCC CACACGAATT GCATTGATTC CA CTTCGGAAG GCGATTGGGT
TTAGACCCGA GAGTAACGAT TGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGTGAGGTC
GGCAGTTCGA ATCTGCCCAG ACCCACCAAT CGAAGGGCC ATAGCTCAGC TGGGAGAGCG CCTGCTTTC
ACGCAGGAGG TCAGCGGTC GATCCCGCTT GGCTCCACCA TTAACCTCTAG TCGCCGAAAG CTCAGAAATG
AGTGTTTACC AGGATGAGGT TGATTGCCCTG GGTGAACAT TGATTCTGG ACTTTCGCC AGAACTGTT
TTTAAAAATT TGGGTATGTG ATAGAAGTAG ACCGATGTGT TGCTTTCAC TGCAGCATGT CGCGTCAAGG
TAAATTTGC GTGTTCTCTA TGCAAAATTT CGCGAATGT CGTCTTCACG TTATAGACAG TAACCAGATT
GCTTGGGGTT ATAT

(SEQ ID NO 113)

39/103

Figure 39

ATCGAAGACT TCAGCTTCTT CATAAGTTCC CACACGAATT GCTTGATTCA CTTGCGAAAA GCGATTGGGT
TGAGACCCGA GAGTGACGAT TGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGTC
GGCAGTTCGA ATCTGCCCAG ACCCACCANT TGTCGGGATG GCCAGTGTC AATGGGGCCA TAGCTCAGCT
GGGAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCC ATCCTCCTTG GCTCCACCAT CAACTCACGA
TCGCTGAAAG CTCAGAAATG AACATTGGTA GTTCAATGTT GATTCTCTGGT CTTTGCGCCA GAACTGTTCT
TTAAAAAATT GGGTATGTGA TAGAAGTGAC TAACAGCGTG TTTCACCTGCA CGTTGTTAAT CAAGGCAAAA
TTTGCGAGTT CAAGCGCGAA TTTTCGGCGA ATGTCGTCTT CACGTTACGA ATCTATAACC AGATTGCTTG
GGTTATAT

(SEQ ID NO 114)

40/103

Figure 40

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ATCGACGACA TCAGCTGTCT CATAAGCTCC CACACGAATT GCTTGATTCA TTGAAGAAGA CGATTAGGTT
AGCAACCTTC GATTGGGTCT GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT
CGAATCTGCC CAGACCCACC AATTGCTGG GGCCATAGCT CAGCTGGGAG AGCGCCTGCC TTGCACGCAG
GAGGTCAGCG GTTCGATCCC GCTTGGCTCC ACCACCCCGC TTGCCAGTTT GTCAAAAGCTT AGAAAATGAAT
ATTCCGCTCG AATATTGATT TCTGAACCTT ATCAGAAATCG TTCTTTAAAA ATTTGGGTAT GTGATAGAAA
GATAGACTGG ACAGCACTTT CACTGGGTGTG TGTTCAAGGCT AAGGTAAAAAT TTGTGAGTAA TTACAAGTTT
TCGGCGAATG TTGTC'TTCAC AGTATAACCA GATTGCTTGG GGT'T'N'TAT

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(SEQ ID NO 115)

41/103

Figure 41

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCTCTGTT TGAGAGGTTA ATTCTTCTCT
ATACTGTTTG TTCCTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AAATAGGTAA CTATTTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGAAAA
ATCAGAAAAA CAACCTTTAC TTCATCGAAG TAAATT

(SEQ ID NO 116)

42/103

Figure 42

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CTAAGGAAAA GGAAACCTGT GAGTTTTCGT TCTTCTCTAT TTGTTTCAGTT TTGAGAGGTT AGTACTTCTC
AGTATGTTTG TTCCTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AGATAATTTA TTATTTTATGA
CACAAAGTAAC CGAGAAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA
ATCAGAAAAA CAACCTTTAC TTCGTAGAAG TAAATT
```

(SEQ ID NO 117)

43/103

Figure 43

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTGTT TGAGAGGTTA TTACTTCTCT
GTATGTTTGT TCTTTGAAAA CTAGATAAGA AAGTTAGTAA AGTAGTGTA CTATTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TAATTCGACG TATCATCGCT
ATTAGAAAAA CAACCTTTAC TTCGACGAAG TAAATT

(SEQ ID NO 118)

Figure 44

GGCCTATAGC TCAGCTGGTT AGAGCGCACG CCTGATAAGC GTGAGGTCGA TGGTTCGAGT CCATTTAGGC
CCACTTTTTC TTTCTGACAG AAGAAACACT GTATAACCTA TTTAAGGGGC CTAGCTCAG CTGGGAGAGC
GCCTGCTTTG CACGCAGGAG GTCAGCGGTT CGATCCCGCT AGGCTCCACC AAAATTGTTT TTTGAAAACCT
AGATAAGAAA GTTAGTAAAG TTAGCATAA TAGGTAAC TAAGTAACCGA AAGTAACCGA GAATCATCTG
AAAGTGAATC TTTTCATCTGA TTGGAAGTAT CATCGCTGAT ACGAAATAATC AGAAATAACAA CCTTTACTTC
ATCGAAGTAA ATT

(SEQ ID NO 119)

45/103

Figure 45

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TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCTCTATT TGTTCAGTTT TGAGAGGTTA CTCTCTTTTA
TGTCAGATAA AGTATGCAAG GCACTATGCT TGAAGCATCG CGCCACTACA TTTTGTGACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTGAGTC CATTAGGCC CACTTTTCT
TTCTGACATA AGAAATACAA ATAATCATAC CCTTTACGG GGCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGCACGCAG GAGTCAAGCG GTTCGATCCC GCTAGGCTCC ACCAAATATG TTCCTTGA AAA ACTAGATAAG
AAAGTTAGTA AAGTTAGCAT AGATAATTAA TTATTTATGA CACAAGTAAC CGAGAAATCAT CTGAAGAATGA
ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA ATCAGAAAAA CAACCTTTTAC TTTCGTTAGAAG
TAAATT
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(SEQ ID NO 120)

Figure 46

TAAGGAAAAG GAAACCTGTN AGTTTNCGTN CTTCTCTGTT TGTNCAGTTT TNAGAGGTTA CTCTCTTTNA
TGTCAGATAA GTACGCACG GCACGTTGCC TTGGGCAAG AGCCACTACA TTATTGACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTCGAGTC CATTTAGGCC CACTTTTCT
TTCTGACAGA AGAAATCATT TGCACATCCT ATTAATAAGG GNCCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGCACGCAG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCCAAAATT GTTCTTTGAA AACTAGATAA
GAAAGTTAGT AAAGTTAGCA TAAGTAGTAT AACTATTTAT GACACAAGTA ACCGAGAAATC ATCTGAAAAGT
GAATCTTTCA TCTAATTCCA CGTATCATCG CTGATACAGA CAATTNGAAA AACAAACCTTT ACTTCGACGA
AGTAAATT

(SEQ ID NO 121)

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Figure 47

TAAGGATAAG GATAACTGTC TTAGGACGGT TTGACTAGGT TGGGCAAGCG TTTTTTTAAAT CTTGTATTCT
ATTCCCTTTTG CATGTGTAAG CGTTGTTCC AAAACATTTA GTTTACGATC AAGTATGTTA TGFAAATAAT
ATGGTAACAA GTAAATTCAC ATATAATAAT AGACGTTAA GAATATATGT CTTTAGGTGA TGTTAACTTG
CATGGATCAA TAATTACA

(SEQ ID NO 122)

48/103

Figure 48

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCTATTTC A TTTGTGTTGT TAAGAGTAGC GTGGTGAGGA CGAGACATAT AGTTTGTGAT CAAGTATGTT
ATTGTAAGA AATAATCATG GTAACAAGTA TATTTCACGC ATAATAATAG ACGTTTAAGA GTATTGTCT
TTTAGGTGAA GTGCTTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 123)

49/103

Figure 49

CAAAATGGAGT TTTTATTTT TATTATCTT AAACACCCAT TAATTTTTC GGTGTTAAA CCCAAATCAA
TGTTTGGTCT CACAACTAAC ACATTGGTC AGTTGTATC CAGTCTGAA AGAATGTTT TGAACAGTTC
TTTCAAAAC GAAACGACA ATCTTCTAG TTCCAAAAT AATACCAA GGATCAATAC AATAAGTTAC
TAAGGGCTTA TGGT

(SEQ ID NO 124)

50/103

Figure 50

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CTAATGAAGT TTTTACTTT TTCTTTTCAT CTTTAATAAA GATAAATACT AAACAAAACA TCAAAATCCA
TTTATTATC GGTGGTAAAT TAAACCCAAA TCCCTGTTTG GTCTCACAAC TAACATATTT GGTGAGATTG
TATCCAGTTC TGAAGAACA TTTCCGCTTC TTTCAAAACT GAAACGACA ATCTTCTAG TTCCAATAA
ATACCAAAGG ATCAATACAA TAAGTTACTA AGGCCTTATG GT
```

(SEQ ID NO 125)

Figure 51

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AACGAAAGAT TGACGATTGG TAAGAAATCCA CAACAAGTTG TTCTTTCATAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTC AAG TCTTGTCAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGATAAAAGA TACATGATTG ATGATGTAAG CTGGGGACTT AGCTTAGTTG
GTAGAGCGCC TGCTTTGCAC GCAGGAGGTC AGGAGTTCGA CTCCTCCTAGT CTCCACCAGA ACTTAAGATA
AGTTCGGATT ACAGAAATTA GTAAATAAAG ATTGAGATCT TGGTTTATTA ACTTCTGTGA TTTCATTATC
ACGGTAATTA GTGTGATCTG ACGAAGACAC ATTAATCTAT TAACAGATTG GCAAAATTGA GTCTGAAAATA
AATTGTTTAC TCAAGAGTTT AGGTTAAGCA ATTAATCTAG ATGAATTGAG AACTAGCAAA TTAACCTGAAT
CAAGCGTTTT GGTATGTGAA TTTAGATTGA AGCTGTACAG TGCCTTAAGTIG CACAGTGCCTC TAAACCTGAAA
TGTTGAAGTT ACTAACTTGT AGGTAACATC GACTGTTTGG GGTTCGTAAT

(SEQ ID NO 126)

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Figure 52

AACGAAAGAT TGACGATTGG TAAGAAATCCA CGACAAGTTG TTCTTCATAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCCACAC GCTTGATAAG CGTGGGGTCA CAAGTTC AAG TCTTGT CAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGAAGAAGAG ATACATAACT GATGATGTAA GCTGGGGACT TAGCTTAGTT
GGTAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 127)

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Figure 53

AACGAAAGAT TGATGGCCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTGAGA CCCACCAAAT
CTGAAAGATA TGTCGTTTCAT TATGATTAAA GCTGGGGACT TAGCTTAGTT GGTAGAGCGC CTGCTTTGCA
CGCAGGAGGT CAGGAGTTTCG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 128)

54/103

Figure 54

AACGAAAGAT TGACGATTGG TAAGAAATCCA CAACAAGTTG TTCTTCATGA CGATGTATCT GAGGGTCTGT
AGCTCAGTTG GTTAGAGCAC ACGCTTGATA AGCGTGGGGT CACAAGTTCA AGTCTTGTCA GACCCACCAA
ATCTGACTAA CAAGCATTAT TAAATGCTGA ATACAGAAAA ACAGAGACAT TGACTTATTG ATAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA
CCA

(SEQ ID NO 129)

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Figure 55

AACGAAAGAT TGGTGACCCG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTC AAG TCTTGT CAGA CCCACCACTA
CTGACGGAAGT GATGAATAAT CACAAGCTGC TAGATGAAAA GATATGTCGT TCATTATGAT TAAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA
CCA

(SEQ ID NO 130)

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Figure 56

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TAAGGAAGAT CGAGAAATTGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCTCTTTCT TCATTGTTGA
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GCCCATCAGG GCCGACGGCC
GGTCGGCCTT GCNAAGCTTC GCTTCGGGGT GGATCTGTGG ATCGCGTAGT AGCGT'T'GCG 'TCGGT'AT'CTG
GGCTGTAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGGTCGG AGGT'TCAAGT CCTCCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGGTCGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGT'TGA GACGGATAT'T GGCNA'TCAAC AAAAGAAAGA
AACAAAGTTG CGGACTN'TA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAGA T'GTAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCT'T TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TCGGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGTC'TTA GGGCATTTGGT GGATGCCCTG GCATGCAC
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(SEQ ID NO 131)

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Figure 57

TAAGGAGGAT CGAGAAATTGG AAAGAGGCCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGNC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCTCTTTCT TCAATTGTTGA
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GNCCATCAGG GCCGACGGCC
GGTCGGCCTT GCGAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGGC TCGGTATCTG
GGCTTGAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCGG AGGTTCAAAGT CCTCCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGTCTGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGA GACGGATATT GGCAATCAAC AAAAGAAAGA
AACAAAGTTG CGGACTNTTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAG TGTAAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATTAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TCGCGCTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGTCTTAA GGGCATTTGGT GGATGCCCTG GCATGCAC

(SEQ ID NO 132)

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Figure 58

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CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GCGTCTTGC
GAAGCAGACT GATACGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGGT
CGAATCCCCT AGGGACGCC ACTTGCGCGG TAAATGTGA AAGCGTTGCC ATCAGTATCT CAAAACTGAC
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAAATCTG GATCAAGCTG AAAATTGAAA CACAGAACAA
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACGA TGATGAATCG TAAGAAACAT CTCGGGTG
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TGA

(SEQ ID NO 133)

59/103

Figure 59

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CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTTCCACG
CCTTGCTCTCA GGAAAAATTA TCGGTAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGCTGCGG TTCGATCCCG CATAGCTCCA CCATATCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCCA AGTTTGTCTC TTTAAAAATC TGGATCAAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGCTT GTTCGTGAGT CTCTCAAAAT TTCGCAACAC GATGATGAAT
CGTAAGAAAC ATCTTCGGGT TGTGA
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(SEQ ID NO 134)

60/103

Figure 60

CCTTAAAGAA GCGTACTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GCGTCTTGC
GAAGCAGAÇT GATACGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTT
CGAATCCCCCT AGGGGACGCC ACTTGC GCGG TAATGTGTGA AAGCGTTGCC ATCAGTATCT CAAAAC'TGAC
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAATCTG GATCAAGCTG AAAAT'TGAAA CACAGAACAA
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACCGA TGATGAATCG TAAGAACAAT CTTCGGGTTG
TGA

(SEQ ID NO 135)

61/103

Figure 61

CCTTAAAGAA CTGTTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCCTGCTT TGCACGCAGG AGTCTGCGG TTCGATCCCC CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACTGCCA AGTTTTCCTC TTTAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAATT TTCGCAACAC G

(SEQ ID NO 136)

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Figure 62

CCTTAAAGAA GCGTACTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAG TGAATAGCAA GCGTCTTGC
GATTGAGACT TCAGTGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTT
CGAATCCCCT AGGGACGCC AGCGTTCAAA CTGATGAGGT CAAACCTCCA GGGACGCCAC TTGCTGGTT
GTGAGTGAAA GTCACCTGCC TTAATATCTC AAACTGACT TACGAGTCAC GTTTGAGATA TTTGCTCTTT
AAAAATCTGG ATCAAGCTGA AAATTGAAAC ACAGAACAAAC GAAAGTTGTT CGTGAGTCTC TCAAATTTTC
GCAACACGAT GATGAATCGT AAGAAACATC TTCGGGTTGT GA

(SEQ ID NO 137)

63/103

Figure 63

CCTTAAAGAA ACGGTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG GTGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCA GGAATAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCGA AGTTTGTCTC TTTAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCCTCAAAAT TTCGCAACAC GATGATGAAAT
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 138)

64/103

Figure 64

CTAAGGATAT ATTCGGAACA TCCTCTTCGG AAGATGCCGA ATAACGTGAC ATATTGTATT CAGTTTGAA
TGTTTATTA ACATTCAAAT ATTTTGTGT TAAAGTGATA TTGCTTTTGA AAATAAGCA GTATGCCGAGC
GCTTGACTAA AAAAAATTGT ACATTGAAA CTAGATAAGT AAGTAAAATA TAGATTTTAC CAAGCNAAC
CGAGTGAATA AAGAGTTTA AATAAGCTTG AATTCATAAG AAATAATCGC TAGTGTTCGA AAGAACAAC
ACAAGATTAA TAACGCGTTT AAATCTTTT ATAAAGAAC GTTAACGTTT GACTTATAA
AATGGTGAA ACATA

(SEQ ID NO 139)

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Figure 65

CTAAGGATAT ATTCCGGAACA TCTTCTTCAG AAGATGCCGA ATAACGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTTA ACATTCAAAAT ATTTTTCGCT TAAAGTGATA TTGCTTATGC GAGCNCCTGA CAATCTATTC
TTTATTAAAGA AAGCGCTTGT CAGACAAATGC ATTAAGAAAA ATTAAGGCGG AGTTTACCTT TGTAATAAGAG
CATTTGATTT TTTGAAAAATA AAGCAGTATG CGAGCGCTTG ACTAAAAAGA AATTGTACAT TGAANAACIAG
ATAAGTAAGT AAAATATAGA TTTTACCAAG CAAAACCGAG TGAATAAAAA GTTTTAAATA AGCTTGAAAT
CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAAATAC GCGTTTAAAT CTTTATTATA
AAGAAAACGT TTAGCAGACA ATGAGTTAAA TTATTTTAAA GCAGAGTTTA CTTATGTAAA TGAGCATTTA
AAATAATGAA AACGAAGCCG TATGTGAGCA TTTGACTTAT AAAAATGGTG GAAACATA

(SEQ ID NO 140)

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Figure 66

CTAAGGATAT ATTCGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTA ACATTCAAAT ATTTTGTGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CAATCTATTC
TTTTTAAAGA AAGCGGTTGT CAGACAAATGC ATTAAGAAAA ATTAAGCGG AGTTTACTTT TGTAATGAG
CATTGATTT TTTGAAAAATA AAGCAGTATG CGAGCGCTTG ACTAAAANGA AATTGTACAT TGA AAAACTAG
ATAAGTAAGT AAAATATAGA TTTTACCAAG CAAAACCGAG TGAATAAAGA GTTTTGAATA AGCTTGAATT
CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAAATAC GCGTTTAAAT CTTTTTATAA
AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAATG GTGGAAACAT A

(SEQ ID NO 141)

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Figure 67

CTAAGGATAT ATTCCGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGNTTTGAA
TGTTTATTTA ACATTCAAAA AATGGGCCCTA TAGCTCAGCT GGTTAGAGCG CACGCCCTGAT AAGCGTGAGG
TCGGTGGTTC GAGTCCACTT AGGCCACCCA TTATTGTAC ATTGAAAACCT AGATAAGTAA GTAAAAATATA
GATTTACCA AGCAAAACCG AGTGAATAAA GAGTTTAAA TAAGCTTGAA TTCATAAGAA ATAATCGCTA
GTGTTGAAA GAACACTCAC AAGATTAAATA ACGCGTTTAA ATCTTTTAT AAAAGAACGT AACTTCATGT
TAACGTTTGA CTTATAAAA TGGTGGAAAC ATA

(SEQ ID NO 142)

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Figure 68

CTAAGGATAT ATTCGGAACA TCTTCYTCAG AAGATGCGGA ATAATGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTTA ACATTCAAAT ATTTTGTGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CTAAAAAGAA
ATTGTACATT GAAACTAGA TAAAGTAAGTA AAANTATAGA TTTTACCAAG CAAAACCGAG TGAAATAAGA
GTTTAAATA AGCTTGAATT CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAAATAC
GCGTTTAAAT CTTTATTATA AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAATG GTGGAAACAT

A

(SEQ ID NO 143)

69/103

Figure 69

CTAAGGATAT ATTCGGAACA TCTTCTACGA AGATGAGGGA ATACGCTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTAA CATTCAATTG TACATTGNA AACTAGATAAG TAAGTAAGAT TTTACCAAGC AAAACCGAGT
GAATAGAGTT TTAAATAAGC TTGAATTTCAT AAATAATCGC TAGTGTTCCA AAGACNTCCA CAAGATTAAAT
AACTAGTTT AGCTATTAT TTTGAATAAC AATCAAAAT ATGGTGGGAC ATA

(SEQ ID NO 144)

70/103

Figure 70

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGAG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCCACGCA GGAGGTCAGC GGTTCCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAAGA GTTATGACT GAAAGGTCAA AAAATAA

(SEQ ID NO 145)

71/103

Figure 71

AAGGAAATGG AACACGTTTA TCGTCTTATT TAGTTTGTAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTNGCACGCA GGAGGTCAGC GGTTCCGATCC CGCTAGGCTC CATCAGGATA CANTCCTACT
AAACTTAATA CAAGTGAAGT TGAACACGCA ACTCACTTCC TAGGAAAATA GACAATCTTC GCTTGTGTGC
AAGGCACACA TGGTCAGATT CCTAATTTTC TACAGAAGTT TCGCTAAAGC GAGCGTTGCT TAGTATCCTA
TATAATAGTC CATNGAAAAT TGAATATCTA TATCAAAATC CACGATCTAG AAATAGATTG TGGAAAACGTA
ACAAGAAATT AACCCGNAAA CGCTG

(SEQ ID NO 146)

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Figure 72

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGGTCAGAAA ATAA

(SEQ ID NO 147)

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Figure 73

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CTAAGGATAT ATTGGAACA TCTTCTTACG AAGATGCAGG AATAACATTG ACATATTGTA TTCAGNTGTG
AATGCTCATT GGAGNATTCA TNGCATNATT TGGTNCATTG ACANCTAGAT AAGNAAGTAA AATTATGAT
TTTACCAAGC AAAACCGAGT GAATTAGAGT TNTNNAACAA GCTTTGATTT CAAAAAGAAA TAATCGCTAG
TGTTGGAAG AACACTCACA GATTANTAAC ATCTTGGGTT TTCACCCGAC TTGTTTCGTNT CGAAAGTCAA
AAAA
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(SEQ ID NO 148)

74/103

Figure 74

AAGGATAAGG AACTGCCGAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTC GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGACGCA GGAGGTCAGC GGTCGATCC CGTAGGCTC CATGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAA AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAAA AAATAA

(SEQ ID NO 149)

Figure 75

AAGGATAAGG AACTGCCCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAG
GTAATGCACA TTGAAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 150)

Figure 76

AAGGAAAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTT GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGACACGCA GGAGGTCAGC GGTTTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAATAGTA ACAAGAAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 151)

77/103

Figure 77

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCGACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAGAAA ATAA

(SEQ ID NO 152)

78/103

Figure 78

AAGGATAAGG AACTGCCGAT TGGTCCTTGT TAGCTTGAG AGGTCTTG TG GGGCCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAAAAA TAA

(SEQ ID NO 153)

SUBSTITUTE SHEET (RULE 26)

Figure 79

TAAGGAAGAT CGAGAATTGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
 GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCTCTTTCT TCATTTGTTGA
 TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCCTG CGCAGGCGCG GCCCATCAGG GCCGAACGGC
 CGGTCGGCCT TGCNAAGCTT CGCTTCGGG TGGATCTGTG GATCGCGTAG TAGCGTTTGC GT'CGGTATCT'
 GGGCTTGTAG CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCG GAGGTTCAAG TCCTCCCAGG 79/13
 CCCACCAAGT TACTTGATGA GGGGCCGTAG CTCAGCTGGG AGAGCACCTG CTTTGCAAGC AGGGGGTCGT 13
 CGGTCGATC CCGTCCGGCT CCACCATCAT GTTGGTGTG AGACGGATAT TGGCAATCAA CAAAAGAAAAG
 AAACAAGTT GCGGACTNTT ACGAAAGTCT GCCTGTTCTG TATGAAATCG TGAAGAGAAAG ATGTAATCGG
 ATCAACTGAA GAGTTGATGT CGAAGAAGC TTGCTCAAGC CTTGCATAAT GATTGATGTG TTTAACCGCC
 ATCACCGATT GTATCTCGAG AAGCTGGTCT TTCTGCTGAT ACTGTTGAAA CGAGCATTTG CAGTCGAATG
 GCAACATTCG GCGTCGCATA ATCGGGCTTT AAGAGCTGAG TTTTGATGGA TATTGGCAAT GAGAGTGATC
 AAGTGTCTTA AGGGCATTGG TGGATGCCCTT GGCATGCAC

(SEQ ID NO 154)

Figure 80

AAGGAGCACG ACGAGAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCTCGTCT GTAGTGGACG
GAAGCCGGGT GCACAACAAC AAGCAAGCCA GACACACTAT TGGGTCCCTGA GGCAACATCT CTGTTGGTTT
CGGGATGTTG TCCCACCATC TTGGTGTTGG GGTGGTGTGT TTGAGAAATTG GATAGTGGTT GCGAGCATCA
ATTGGATGCG CTGCCTTTTG GTGGCGTGTT CTGTTGTGCA ATTTATTCT TTGGTTTTTG TGTTTAT

(SEQ ID NO 157)

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Figure 81

AAGGAGCACC ACGAGAAACA CCCCATTGG TGGGGTGTA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTTTT TGGTATTGTG
GTTCCGT

(SEQ ID NO 158)

Figure 82

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTGCAGAG
CATCTAGACG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTTTT TGGTTTGTGT
GTTTCGT

(SEQ ID NO 159)

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Figure 83

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGNNCGGGT NNACAACAAC NGCCAATCGC CGGACACACT ATTGGGNCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTNT TGGTTTGTGT
GTTCGT

(SEQ ID NO 160)

84/103

Figure 84

AAGGAGCACCC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAAACAGC AGACAAATCGC CAGACACACT AATTGGGCCCC GAGACAACAC TCGGCCGACT
TTGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTTGTTGAG CATGAAATAG TGGTTGCCGAG
CATCTAGACG GATGCGTTGC CCTCGGGCCG CGTGTTCGTC AAAAATGTGT AATTTTCTT TTTGGTTTTT
GTGTTTCGT

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Figure 85

AAGGAGCACC ACGAGAAACA CTCCAAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAAACAC AGGCAATCGC CAGACACACT ATTGGGCCCC TCGGCCGGCT
TTGAGTCGAA GTGGTGTCCC TCCATCTTGG TGGTGGGTG TGGTGTGA GCAATTGAATA GTGGTTGCCG
GCATCTAGAC GGATGCGTTG CCTTCGGGCC GCGTGTTCGT CAAAATGTG TAAATTTTTC TTTTGGTTTT
TGTGTTTCGT

(SEQ ID NO 162)

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Figure 86

AGGGAGCACC GNAACGCAT CCCGCGTGGG GTGTGGGTTT GCGTGGTGT GCGTCGGNC CGAGGTGTGTG
GGCAGCAGGC AGTAACCNCC GGAACACTGT TGGGTTTGA GNNAACACACC GTGGTGGTGT TGTGCTCCCC
GTGGTGNCGG GGTGTGGTGT TTGAGTGTGT GATAGTGGTT GCGAGCATCT GGCAAGACT GTGGTAAGCG
GTTTTTGTG ANTGTTTCT GGTGTTGT

(SEQ ID NO 163)

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Figure 87

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGNCGGGT GCACAACAAC AGNCAATCGC CAGACACACT ATTGNNCCCT GAGACAACAC TCGGCCGACT
TNGGTTGAAG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCCGAG
CATCTAANTG AACGCGTCGC CGNCAACGGT TACGTGTTCG TTTTGTGTAA TTNTTCTAT TGGTTTGTGT
GTTCGT

(SEQ ID NO 164)

88/103

Figure 88

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CAGACACACT ATTGGNCCCT GAGACAACAC TCGGCCGACT
TTGGTCGAAG TGGTGTCGCC CCATCTTGGT GGCGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCCGAA
CATCTAAATG AACGCGTTGC CGGCAACGGT TACGTGTTCC TTTTAGTGTA ATTNTTCTA ATGGTTTTTG
TGTTTCGT

(SEQ ID NO 165)

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Figure 89

AAGGAGCACC ACGAGACCTG GGCCGGCCCC GCAGATCGCG GGATCAGCTG AGCTTTCAGG CGATTTCGTTG
GATGGCCTCG CACCTGTAGT GGGTGGGGGT CTGGTGCACT CAACAAACTT GCGGTGGGAT GCGGGAAGC
ATCTGCGGAA AATCATCAGA CACACTATTG GGCTTTGAGA CAACAGGCC CCAGNCCTGN CCCGTTGGGG
GCAGNGGGTG TGTGTTGCC TCACTTTGGT GGTGGGGGTG GTGTTTGAAT TGTGGATAGT GGTTCGAGC
ATCTAGCGCG CAGAAATGTGT GGTCCTCCTC CTTGTGGGTG GGGCCTGGTT TTGTGTGCGA TTGATGTGCA
ATTTCTTTTG AAACATCATTT TTTGGTTTTT GTGTTGT

(SEQ ID NO 166)

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Figure 90

AAGGAGCACC ACGAAAAACT CCCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AAGCGAAACG CCGGACACAC TATTGGGTCC TGAGGCAACA CTCGGGTTTG
TCCCCCTCAG GGATTTCTG GGTGTTGTCC CACCATCTTG GTGGTGGGT GTGGTGTG AGAATTGGAT
AGTGGTTGCG AGCATCAAAT GGATGCGTTG CCCCTACGGG TAGCGTGTTC TTTTGTGCAA TTTTATTCNT
TGGTTTTTGT GTTTGT

(SEQ ID NO 167)

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Figure 21

AAGGAGCACC ACGAGAAGCA CTCCAACTGG TGGGGTGCAA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGAGCCGGGT GCGCGACAAC GAACGAGCCA GACACACTAT TGGGTCCTGA GGCAACACTC GGGCTTGGCC
AGAGCTGTG TCCCAACCAC TCGGTGGTGG GGTGTGGTGT TTGAGAAATTG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCCCTAC GGTGGCGTG TTCTTTTGTG CAAATTTAAT CTTTGGTTT TGTGT'T'IGT'

(SEQ ID NO 168)

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Figure 92

AAGGAGCACC ACGAAAACA CCCCAACTGG TGGGGTGTA GCGGTGAGGG GCTCCCGTCT GTAGTAGACG
GGCGCCGGGT GCGCAACAGC AAGCGAGCCA GACACACTAT TGGGTCCCTGA GGCAACACTC GGGCTTGTCT
TGGACTCGTC CAAGAGTGTT GTCCCACCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT
TGCGAGCATC ANCTGGATGC GTTGCCCCCA GGGTAGCGT GTTCTTTTGT GCAATTNTAT TCNNTGGTTT
TTGTGTTAGT

(SEQ ID NO 169)

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Figure 93

AAGGAGCACC ACGAAAACA CTCGCGATCC GGTGGGGTGT GAGCCGTGAG GGAGCCCGTG CCTGTAGTGG
GTGTGGGTTG GGTGCGCGAC AACAAATGGG AAAAATCGCT GGGCACACTA TTGGGCTTTG AGGCAACACC
TGGTTTGT TT TGGTGGGTGT CGCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTTGTGG ATAGTGGTTG
CGAGCATCTA AGCAAAAGCT GTTGTTTTGAC GGTTTTGTG GAGTGTTGTG TGTGT

(SEQ ID NO 170)

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Figure 24

AAGGAGCACC ACGAAAACA CTCCAATTGG TGGGGTGTA A GCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCCGGT GCACAACAGC AATGAATCG CCAGACACAC TGTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTATT CATTGAAAT GTGTAATTTT
CTTCTTGGT TTTGTGTGT

(SEQ ID NO 171)

95/103

Figure 25

AAGGAGCACC ACGAAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTGT CATGAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 172)

96/103

Figure 96

AAGGAGCACC ACGAAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGGT GTGGTGTGTTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGANACGTT GCCAGTAATG GTGGCGTGTT CATTGAAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 173)

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Figure 97

AAGGAGCACC	ATTTCACGT	CGAATGAACT	GAGAACATAA	AGCGAGTATC	TGTAGTGGAT	ACATGCTTGG
TGAATATGTT	TTATAAATCC	TGTCCACCCC	GTGGATAGGT	AGTCGGCAAA	ACGTCGGACT	GTCAATAAGAA
TTGAAACGCT	GGCACACTGT	TGGGTCCTGA	GGCAACACAT	TGTGTTGTCA	CCCTGCTTGG	TGGTGGGGTG
TGGTCCTTGA	CTTATGGATA	GTGGTTGCGA	GCATCTAAAC	ATAGCCTCGC	TCGTTTTCGA	GTGAGGCTGG
TTTTTGCAAT	TTTATTAGCT					

(SEQ ID NO 174)

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Figure 98

CCTAATGATA TTGATTCCGG TGAAGTGCTC ACACAGATTG TCTGATGAAA AAGTAACGAG CAGAAATACC
TTTATAGGCT TGTAAGCTCAG GTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTCGGTGGT TCAAGTCCAC
TCAGGCCCTAC CACTTCTCGA AGTGGAAAAG GTACTGCACG TGACTGTATG GGGCTATAGC TCAGCTGGGA
GAGCGCCTGC CTTGCACGCA GGAGGTCAGC GGTTCCGATCC CGCTTAGCTC CACCATATAG TCCTGTATTT
CAATACTTCA GAGTGTAAGT GCAACAGTAT GCTGCGAAGT ATT'TT'GCTCT TTAACAATCT GGAACAAGCT
GAAATTTGAA ACATGACAGC TGAACCTTAT CCTTCCGTAG AAGTATTTGGG G'AAAGGATTA ACCTGTCTATA
GAGTCTCTCA AATGTAGCAG CACGAAAGTG GAAACACCTT CGGGTTGTGA

(SEQ ID NO 195)

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Figure 29

CCTAATGATA TTGATTCCGG TGAAGTGCTC ACACAGATTG TTTGATAGAA ACGTAATGAG CAAAAGCGCT
ACCTGTTGAT GTAATGAGTC ACTGACTCAT GCTGATACGA ACCGATTAAAG ACAGTCAGTT TAATCGGATT
TTCGTGTCCC CATCGTCTAG AGGCCCTAGGA CACTGCCCTT TCACGGCTGT AACAGGGGTT CGAATCCCCCT
TGGGGACGCC ATTCGATAAT GAGTGAAAGA CATTATCACC GGTTCTTGGA ACCGAAAACA TCTTAAAGAT
GACTCTTGCG AGTCGTGTTT AAGATATTGC TCTTTAACAA TCTGGAACAA GCTGAAAATT GAAACATGAC
AGCTGAAACT TATCCCTCCG TAGAAGTATT GGGGTAAGGA TTAACCTGTC ATAGAGTCTC TCAAAATGTAG
CAGCACGAAA GTGGAAACAC CTTCCGGGTTG TGA

(SEQ ID NO 196)

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Figure 100

TAAGGATAAG GAAGAAGCCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCTATTCA TTTGTGTTGT TAAGAGTAGC GCGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT
ATTGTAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAATAG ACGTTAAGA GTATTGTCT
TTTAGGTGAA GTGCTTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 197)

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Figure 101

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTTTCAT CTCTCAAAAC
GTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTAAGAA GACGAAGAGA AACCGTAGGT TTTTCTTCAA
CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT TCATAAGCGA TCGCACGTTT ATGAAAACAC
AACAAACACCT TCGTAAGAAG GATGA

(SEQ ID NO 213)

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Figure 102

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA
CTGAGTACCA GGTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGAATA AACCTTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCCTGCTTT GCACGCAGGA GGTACGCGGT
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTA AAAA
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAATCAACC GAGAAAGAAT CTTTCCGTTT
TCATAAGCGA TCGCACGTTT ATGAAAACAC AACACACCTT TCGTAAGAAG GATGA

(SEQ ID NO 214)

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Figure 103

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTTC AGAGTCAAT GACGTCATA
CTGAGTACCA GTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGAATA AACCTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA CAAAGATAGT TTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTAATA
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC
GCACGTTTAT GAAACACAA CAACACCTTC GTAAGAAGGA TGA

(SEQ ID NO 215)